Valley Talls Dam

MEMORANDUM

TO:

Bruce Dinnie, Parks & Rec Director

FROM:

Karl F. Acimovic, P.E.

DATE:

May 27, 2013

SUBJECT:

Inspection Report Valley Falls Dam

Walker Reservoir Dam

NOTES:

With respect to an inspection of the two referenced dams noted above, conducted on May 21 with you and Terry McCarthy, I have the following findings and recommendations.

<u>Valley Falls Dam</u> – The condition of the dam is basically similar to that identified in my report of October 1997 and recommendations continue to include:

- (1) Removal of Trees & Brush
- (2) Increase of Spillway Capacity
- (3) New or Modified Intake / Outlet Structure
- (4) Embankment Reconstruction & Toe Drain Installation
- (5) Reconstruction of the Existing Primary Spillway

The most urgent of these is the removal of trees and brush, subsequent to which I recommend continued and consistent maintenance for both dam safety and ease of future upkeep. Following removal of trees and brush, I would recommend another inspection to ascertain any underlying issues, such as ground saturation along the embankment toe.

<u>Walker Reservoir Dam</u> – A report on the condition of this dam was prepared in 1998 and, as with Valley Falls, it identified issues of major concern and recommendations which continue to include:

- (1) Removal of Trees & Brush
- (2) Reconstruction and Increase in Spillway Capacity
- (3) New Intake / Outlet Structure

- (4) Embankment Reconstruction & Toe Drain Installation
- (5) Issues of Site Ownership and Access

Of these, clearing of trees and brush once again takes precedence and should be accomplished as soon as possible to avoid structural issues with the dam embankment. As with Valley Falls, another inspection should be conducted once this task has been accomplished to identify any urgent issues. A recommendation had been made to acquire land downstream of the dam, since the property line location did not allow for access to either maintain or repair the structure. Since that time, land adjacent to the site appears to have been acquired by the Connecticut DEEP. This should alleviate any issues related to repairs and maintenance since the DEEP would have an interest in the upkeep and maintenance of the dam. Clear access and a staging area location for repairs could ease costs related to reconstruction.

<u>For Both Dams</u> – A foot bridge and / or small vehicle maintenance bridge should be constructed for both sites across the modified spillways. In the case of Valley Falls, I would recommend replacement of the existing structure. This is essential to both sites pedestrian access to trails and to facilitate maintenance by small equipment.

I would also highly recommend that the Town proceed to procure the services of an engineering firm to prepare plans for reconstruction and to submit applications to the appropriate regulatory agencies, while setting aside sufficient funds to accomplish this task. The process of applying to agencies for these types of projects is time dependent and, for both safety and resource preservation issues at both sites, should be addressed as soon as possible.